



August 26, 2010

Sue Wallace Tara Thomas

Miami Fort Generating Station 11021 Brower Road North Bend, OH 45052

Re: Miami Fort NPDES Permit OH0009873 - Revision of Laboratory Results for Outfall 608

Sue & Tara:

For the permit effective July 1, 2009, analysis of Internal Monitoring Station 608 has been performed since July 2009. During August and September of 2009, a study was completed to approximate the effect of the FGD matrix on analytical results. The matrix has high concentrations of total dissolved solids, sulfates and chlorides. Dilutions of the sample at preparation and before instrumental analysis aid in achieving acceptable quality control and analytical results. Method 200.8 (ICP-MS) is more sensitive and therefore allows for greater dilutions at the instrument while maintaining a lower reporting limit. Ohio EPA allowed for the use of this method on some of the metals after reviewing a summary of the study. This was approved in September 2009.

Implementation of these dilutions on the samples took place beginning in September 2009. During a recent review of data and calculations, an error was detected by the laboratory. For this sample site the dilution factor was not applied to the final analytical result. The process of diluting a sample before preparation is not what is normally done for metals digestions. Calculations for these dilutions were not included at instrumental analysis or during final reporting of the data via the laboratory's information management system (LIMS). As a result, the reported values for many of the metals were 1/20th of the actual concentration; due to not applying the 20X dilution factor from the sample preparation.

Following our quality assurance program, a corrective action has been initiated to resolve the issue. The following items were identified to correct the problem:

- 1. Analytical results were recalculated using all dilution factors. (Corrected concentrations for the effected samples are attached to this letter).
- For samples beginning in September 2010 going forward, dilution factors at sample preparation will be reflected in the LIMS system and will be included in the final calculation of analytical results to be reported.
- 3. Program managers will review the calculations each month to ensure accuracy before reports are released by the laboratory.
- 4. Hard copies of the revised reports will be issued to Miami Fort.

Please do not hesitate to contact me with questions or concerns.



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Thanks,

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August 26, 2010

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Attachments: Corrected Analytical Results for Outfall 608 - Miami Fort Station

.cc Pat Coyle, Rodney Wike, Marge Galvin-Karr, Troy Whisenant, Penny Franklin

Corrected Analytical Results for Outfall 608 – Miami Fort Station

Sep-	·09	Analyte	Method	Reported	Corrected	<u>Units</u>
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	8.4	168	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	09-SEP-0027	Chromium	EPA 200.8	<1.0	<20	ug/L
		Copper	EPA 200.8	<1.0	<20	ug/L
		Iron	EPA 200.8	4.5	90	ug/L
Laboratory Sample #:	29021644	Lead	EPA 200.8	< 1.00	<20	ug/L
		Zinc	EPA 200.8	< 1.00	<20	ug/L

Oct-	09		Statle and	Denombed	Compated	1 Im Iba
		Analyte	Method	Reported	Corrected	<u>Unit</u>
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	7.7	154	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	09-OCT-0029	Chromium	EPA 200.8	<1.0	<20	ug/l
		Copper	EPA 200.8	<1.0	<20	ug/L
		Iron	EPA 200.8	15.1	302	ug/L
Laboratory Sample #:	29023538	Lead	EPA 200.8	<1.0	<20	ug/l
		Zinc	EPA 200.8	< 2.00	<40	ug/l

Nov-	Nov-09		Method	Reported	Corrected	<u>Units</u>
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	5.9	118	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	09-NOV-0031	Chromium	EPA 200.8	<1.0	<20	ug/L
		Copper	EPA 200.8	<1.0	<20	ug/L
		Iron	EPA 200.8	7.4	148	ug/L
Laboratory Sample #:	29025225	Lead	EPA 200.8	<1.0	<20	ug/L
		Zinc	EPA 200.8	1.1	22	ug/L

Dec-	Dec-09					
D60-03		Analyte	Method	Reported	Corrected	Units
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	5.5	110	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	09-DEC-0031	Chromium	EPA 200.8	<1.0	<20	ug/L
		Copper	EPA 200.8	<1.0	<20	ug/L
		Iron	EPA 200.8	21.9	438	ug/L
boratory Sample #:	29026933	Lead	EPA 200.8	<1.0	<20	ug/L
		Zinc	EPA 200.8	< 2.00	<40	ug/L

Corrected Analytical Results for Outfall 608 – Miami Fort Station

Jan-	10	Analyte	Method	Reported	Corrected	Units
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	3.3	<20	ug/L
		Cadmium	EPA 200.8	1.00	<20	ug/L
Laboratory Job #:	10-JAN-0042	Chromium	EPA 200.8	7.4	<20	ug/L
		Copper	EPA 200.8	1.3	<20	ug/L
Laboratory Sample #:	30000111	Lead	EPA 200.8	<2.0	<40	ug/L
	and the second second	Zinc	EPA 200.8	5.3	<20	ug/L

Feb-10		Analyte	Method	Reported	Corrected	Unit
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/l
		Barium	EPA 200.8	9	180	ug/l
		Cadmium	EPA 200.8	<1.0	<20	ug/
Laboratory Job #:	10-FEB-0027	Chromium	EPA 200.8	<1.0	<20	ug/
		Copper	EPA 200.8	<1.0	<20	ug/
Laboratory Sample #:	30001626	Lead	EPA 200.8	<2.0	<40	ug/
		Zinc	EPA 200.8	<2.0	<40	ug/

Mar-10		Analyte	Method	Reported	Corrected	Units
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<2.0	<40	ug/L
		Barium	EPA 200.8	6	120	ug/L
		Cadmium	EPA 200.8	<2.0	<40	ug/L
Laboratory Job #:	10-MAR-0026	Chromium	EPA 200.8	<2.0	<40	ug/L
		Copper	EPA 200.8	<2.0	<40	ug/L
Laboratory Sample #:	30003367	Lead	EPA 200.8	<2.0	<40	ug/L
		Zinc	EPA 200.8	<4.0	<80	ug/L

Apr-	Apr-10		Method	Reported	Corrected	Units
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	5.5	110	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	10-APR-0028	Chromium	EPA 200.8	<1.0	<20	ug/L
		Copper	EPA 200.8	<1.0	<20	ug/L
Laboratory Sample #:	30005479	Lead	EPA 200.8	<1.0	<20	ug/L
		Zinc	EPA 200.8	< 2.00	<40	ug/L

Corrected Analytical Results for Outfall 608 – Miami Fort Station

May-10		Analyte	Method	Reported	Corrected	Unit
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	6.6	132	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/l
Laboratory Job #:	10-MAY-0027	Chromium	EPA 200.8	1.1	22	ug/l
		Copper	EPA 200.8	<1.0	<20	ug/l
Laboratory Sample #:	30007150	Lead	EPA 200.8	<1.0	<20	ug/l
		Zinc	EPA 200.8	< 2.00	<40	ug/

Jun-	10	Analyte	Method	Reported	Corrected	Units
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	6.2	124	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	10-JUN-0022	Chromium	EPA 200.8	<1.0	<20.	ug/L
		Copper	EPA 200.8	<1.0	<20	ug/L
Laboratory Sample #:	30008963	Lead	EPA 200.8	<1.0	<20	ug/L
		Zinc	EPA 200.8	< 2.00	<40	ug/L

Jul-	10	Analyte	Method	Reported	Corrected	<u>Units</u>
Sample Description:	Miami Fort - Outfall 608	Arsenic	EPA 200.8	<1.0	<20	ug/L
		Barium	EPA 200.8	8.9	178	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	10-JUL-0026	Chromium	EPA 200.8	<1.0	<20	ug/L
	!	Copper	EPA 200.8	1.4	28	ug/L
Laboratory Sample #:	30010774	Lead	EPA 200.8	<1.0	<20	ug/L
		Zinc	EPA 200.8	<2.0	<40	ug/L

Aug	Aug-10		Method	Reported	Corrected	<u>Units</u>
Sample Description:	Miami Fort - Outfall 608	Analyte Arsenic	EPA 200.8	<1.0	<20	ug/L
•		Barium	EPA 200.8	7.2	144	ug/L
		Cadmium	EPA 200.8	<1.0	<20	ug/L
Laboratory Job #:	10-AUG-0026	Chromium	EPA 200.8	1	20	ug/L
•		Copper	EPA 200.8	<1.0	<20	ug/L
Laboratory Sample #:	30012454	Lead	EPA 200.8	<1.0	<20	ug/L
•		Zinc	EPA 200.8	< 2.00	<40	ug/L